Amendments to the Specification:

Please insert the following heading before paragraph [0001]:

Background of the Invention

Please replace paragraph [0002] with the following replacement paragraph:

(0002) ~~Forming~~ Known methods of forming glass-ceramics, especially ~~3D~~ three-dimensional forming ~~using a first method~~ based on the state of the art, starts with a vitreous fabricated material because once the glass has been ceramized the only way of deforming it again is generally via the detour of melting.

Please replace paragraph [0003] with the following replacement paragraph:

(0003) In order to deform the basic glass of glass-ceramics with the forming methods usually used for glass, for example gravity lowering or vacuum lowering, it is typically heated to temperatures around 1000°C where crystal growth will take place if nuclei were previously formed. When the basic glass is heated to the target temperature of 1000°C, for example, where crystal growth can occur, the nucleation range between 700°C and 800°C, where minute crystallization nuclei are separated ~~and which is between 700°C and 800°C~~, inevitably has to be passed.

Please replace paragraph [0004] with the following replacement paragraph:

(0004) In order to prevent nucleation that may be inhomogeneous in the critical nucleation range and to prevent ~~that~~ adverse affects to the properties of the glass-ceramic produced by the subsequent ceramizing process ~~are adversely affected~~ or ~~that the~~ prenucleation which will cause crystallization in the subsequent forming process, thereby making the process impossible, the nucleation range has to be passed as quickly as possible.

Please replace paragraph [0006] with the following replacement paragraph:

(0006) Heating the glass-ceramic blank or the glass blank quickly can be achieved, for example, ~~in that~~ by using high-capacity surface heaters~~, such as gas burners are used~~.

Please replace paragraph [0010] with the following replacement paragraph:

(0010) Therefore, heating with gas burners is especially not suitable for producing complex ~~3D~~ three dimensional glass-ceramics and [[it]] is limited to simple geometries.

Please replace paragraph [0011] with the following replacement paragraph:

(0011) Other disadvantages of heating with gas burners are the following, for example:

- relatively uncontrolled flame operation, and
- intrusion of interfering gasses ~~are carried in~~,

which can adversely affect the quality of the material.

Please replace paragraph [0013] with the following replacement paragraph:

(0013) PCT/FR96/00927 ~~described~~ discloses reprocessing preliminary stages of glass-ceramics where the rolled ribbon of glass coming from high temperatures is formed directly at the melting tank when the required temperature is obtained, even before the critical nucleation range of glass-ceramics is reached.

Please insert the following heading before paragraph [0018]:

Summary of the Invention

Please replace paragraph [0018] with the following replacement paragraph:

(0018) It is the object of the invention to provide a method and a device for producing glass-ceramic parts and/or glass parts by means of deformation of a glass-ceramic blank and/or glass blank which overcome the above described disadvantages. The present method ~~should especially provide~~ provides the following ~~possibilities~~ features:

- a procedure which is independent of the tank operation, for example a secondary procedure,
- complex ~~3D~~ three dimensional deformations even with very small bending radii,
- largely preventing undesired preceramization,
- largely preventing undesired temperature gradients.

Please replace paragraph [0019] with the following replacement paragraph:

(0019) The problem is solved by means of the invention in that the forming process of the present method ~~of the preamble~~ is carried out using infrared radiation, preferably short-wave infrared radiation of < 2.7 μm wavelength or NIR radiation.

Please replace paragraph [0029] with the following replacement paragraph:

(0029) Preheating can be used so as to homogenize the temperature, for example in a conventional oven. ~~Reheating~~ In another embodiment, a formed glass or a formed glass-ceramic is also ~~conceivable~~ reheated.

Please replace paragraph [0030] with the following replacement paragraph:

(0030) In addition to the method, the invention also provides a device for carrying out ~~said~~ the method which ~~is characterized especially in that it comprises~~ includes an infrared radiation hollow having walls, a ceiling and/or a floor reflecting the infrared radiation, where a ~~multiplicity~~ plurality of infrared radiators [[is]] are disposed in the infrared radiation hollow.

Please replace paragraph [0031] with the following replacement paragraph:

(0031) Infrared radiation hollows are described, for example, in ~~US-A-4789771~~ U.S. Patent No. 4,789,771 and ~~EP-A-O 133 847 whose disclosure content has been fully incorporated in this application.~~ EP 0 133 847, the disclosures of which are expressly incorporated herein by reference. Preferably, the portion of the infrared radiation which is reflected and/or scattered by the wall surfaces, the floor and/or the ceiling is more than 50% of the radiation impinging on ~~said~~ the surfaces.

Please replace paragraph [0033] with the following replacement paragraph:

(0033) A particular advantage of using an infrared radiation hollow is that when highly reflecting and/or back scattering wall, floor and/or ceiling materials are used, [[it]] the infrared radiation hollow is a high quality resonator subject only to minor losses and thus it ensures a high energy utilization.

Please insert the following heading before paragraph [0040]:

Brief Description of the Drawings

Please replace paragraph [0041] with the following replacement paragraph:

(0041) Fig. 1 shows the Planckian locus of a potential infrared radiator having a temperature of 2400 K.

Please replace paragraph [0042] with the following replacement paragraph:

(0042) Fig. 2A shows the basic structure of a heating device according to the invention including a radiation hollow.

Please replace paragraph [0043] with the following replacement paragraph:

(0043) Fig. 2B shows the reflectance curve over the wavelength of Al2O3 Sintox AL made by Morgan Matroc, Troisdorf, with a diffuse reflectance of > 95%, and of > 98% over a wide spectral region, in the infrared wavelength range.

Please replace paragraph [0044] with the following replacement paragraph:

(0044) Fig. 3A shows the heating curve of a glass-ceramic blank to be formed in a heating device comprising an infrared radiation hollow.

Please replace paragraph [0045] with the following replacement paragraph:

(0045) Fig. 3B shows the heating curve of a glass blank to be formed in a heating device comprising an infrared radiation hollow.

Please replace paragraph [0046] with the following replacement paragraph:

(0046) Figs. ~~4A+B~~ 4A and 4B show deformation of a glass-ceramic blank and/or glass blank by gravity lowering.

Please replace paragraph [0047] with the following replacement paragraph:

(0047) Figs. ~~5A+B~~ 5A and 5B show deformation of a glass-ceramic blank and/or glass blank by vacuum lowering.

Please replace paragraph [0048] with the following replacement paragraph:

(0048) ~~Fig. 6A+B~~ Figs. 6A and 6B show deformation of a glass-ceramic blank and/or glass blank by lowering, supported by a compression molding tool.

Please replace paragraph [0049] with the following replacement paragraph:

(0049) ~~Fig. 7A+B~~ Figs. 7A and 7B show deformation of a glass-ceramic blank and/or glass blank by lowering, supported by overpressure.

Please replace paragraph [0050] with the following replacement paragraph:

(0050) Fig. 8 shows deformation of a glass-ceramic blank and/or glass blank by means of directional infrared radiators.

Please replace paragraph [0051] with the following replacement paragraph:

(0051) Fig. 9 shows deformation of a glass-ceramic blank and/or glass blank in an infrared radiation hollow including a shield.

Please replace paragraph [0063] with the following replacement paragraph:

(0063) Because the absorption length of the applied short-wave infrared radiation in the glass is very much larger than the dimensions of the objects to be heated most of the impinging radiation is able to pass through the sample. On the other hand, because the absorbed energy per volume is virtually identical at all points of the glass homogeneous heat is achieved over the entire volume. In the test as per Figs. 3A and 3B for the glass-ceramic or glass sample to be formed the infrared radiators and the glass or glass-ceramic blank to be heated are located in a radiation hollow whose walls, floor and/or ceiling consist of a material whose surface is highly reflective, where at least a portion of the wall, floor and/or ceiling surface back scatters the radiation predominantly diffusely. This causes the predominant portion of the radiation, which is initially able to pass through the glass or glass-ceramic blank, to reenter the object to be heated after reflecting or scattering on the wall, floor and/or ceiling, and it is partially absorbed again. The path of the radiation which is also able to pass through the glass or glass-ceramic blank in the second passage continues analogous. This method ~~not only~~ achieves a deep homogeneous ~~heat,~~ heating of the glass or glass-ceramic blank, and the

utilization of the applied energy is considerably better than with a single passage through the glass or glass-ceramic blank.

Please replace paragraph [0070] with the following replacement paragraph:

(0070) Reheating the part in an oven ~~is conceivable~~ may also be carried out subsequent to the forming process.

Please replace paragraph [0084] with the following replacement paragraph:

(0084) Fluted components, for example, can be produced by means of the method of the invention, having a circular arc cross-section of [[r]] less than 150 mm, the component having a width of less than 200 mm and fluted components of glass-ceramic or glass can be formed, for example, having a rectangular or trapezoid cross-section.